
SHIGELLOSIS

Clinical Features: Illness of variable severity characterized by diarrhea, fever, nausea, cramps, and tenesmus. Asymptomatic infections may occur.

Causative Agent: *Shigella* spp., a gram-negative bacterium, including *S. flexneri*, *S. sonnei*, *S. boydii*, and *S. dysenteriae*.

Mode of Transmission: Primarily spread through fecal-oral transmission through direct or indirect contact. May also be spread through water or milk by direct fecal contamination. Humans are the natural host for *Shigella*.

Incubation Period: Ranges from 12 hours to 7 days (average 2 to 4 days).

Period of Communicability: During the acute illness until the organism is no longer present in feces. Organism will usually clear within 4 weeks of illness onset, although in rare cases it may persist for months.

Public Health Significance: Disease may be prevented by promotion of good hand washing. Outbreaks are common among homosexual men, in conditions of overcrowding, and in day care and institutional settings; exclusion policies may apply in some outbreak situations.

Reportable Disease in Kansas Since: 1982

Laboratory Criteria for Surveillance Purposes

- Isolation of *Shigella* spp. from a clinical specimen.

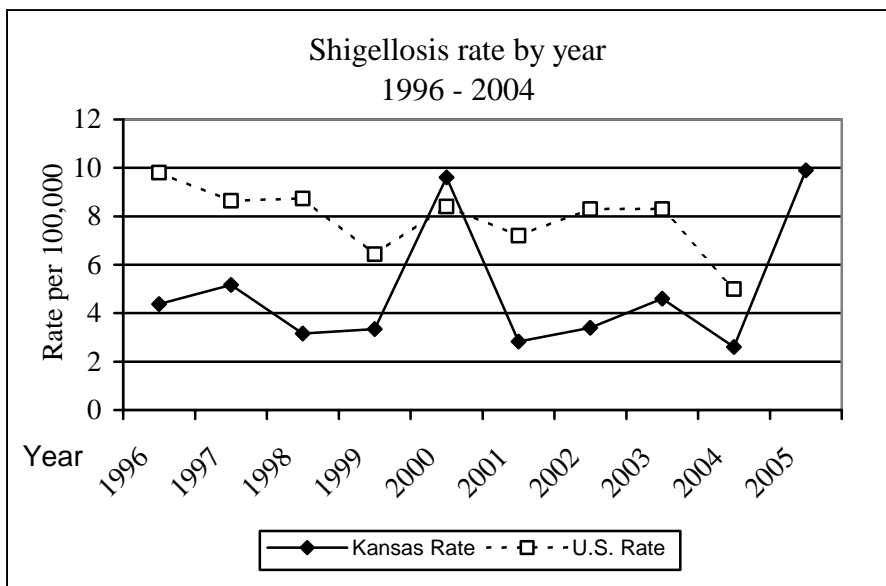
Surveillance Case Definitions

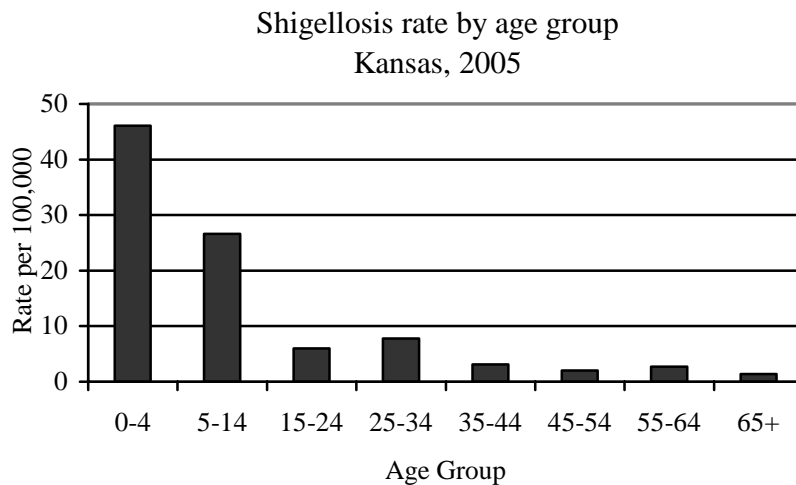
- *Confirmed:* A case that is laboratory confirmed.
- *Probable:* A clinically compatible case that is epidemiologically linked to a confirmed case.

Epidemiology and Trends

2005 Kansas Count: 272

	Rate per 100,000	95% CI
Kansas Rate	9.9	(8.7 - 9.8)
U.S. Rate (2004)	5.0	NA
Gender		
Male	8.1	(6.6 - 9.6)
Female	11.7	(9.9 - 13.5)
Race		
White	4.0	(3.2 - 4.8)
Black	58.3	(46.9 - 69.6)
Asian/Pacific Islander	6.4	(0.1 - 12.7)
Ethnicity		
Hispanic	13.2	(8.4 - 18.0)
Non-Hispanic	5.8	(4.8 - 6.7)
Geographic area		
Urban County	16.3	(14.2 - 18.4)
Non-Urban County	3.3	(2.4 - 4.3)





In 2005, there were 272 confirmed cases of shigellosis in Kansas, a large increase compared to the 81 cases reported in 2004. The three-year median for 2002-2004 was 92 cases.

An increase of shigellosis was identified in Greater Kansas City, Missouri, in early 2005. The source of infection was unknown, but transmission was propagated through person-to-person transmission. Kansas City, Kansas, reported an increase of shigellosis by the summer. Infection first spread among school-aged children and adults, then progressed to diaper-aged children. Local and state health department staff met with school district administrators to distribute information regarding prevention measures and establish procedures to exclude ill students from school. Prevention messages consisted of a campaign to educate school-aged children and parents about proper hand hygiene and transmission of infection.

As a result of the outbreak^{*}, Kansas City area counties reported the greatest number of shigellosis cases. Wyandotte, Johnson, and Leavenworth Counties reported 217 cases, 80% of the state total. Children younger than 10 years of age comprised 69% (n=187) of the total shigellosis cases.

Isolates forwarded to the state laboratory were speciated. Isolates were characterized for 238 (86%) of the 272 cases; 226 (95%) were *S. sonnei*, and 12 (5%) were *S. flexneri*.

^{*} A detailed report regarding the 2005 shigellosis outbreak can be found in section II of this document, "Special Reports".